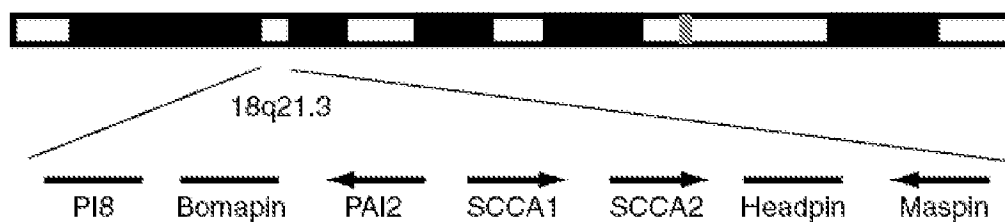


REPLACEMENT SHEET

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A



B



C

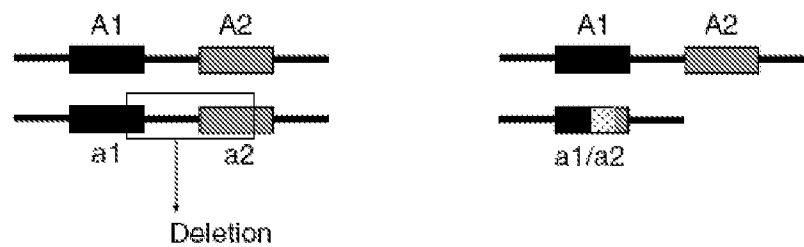


Fig. 1A-C

REPLACEMENT SHEET

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SCCA1 I1-ATGAATTCAC TCAGTGAAGC CAACACCAAG TTCATGTTTCG A**C**CTGTTCCA ACAGTTCAGA
 SCCA2 I1-ATGAATTCAC TCAGTGAAGC CAACACCAAG TTCATGTTTCG A**T**CTGTTCCA ACAGTTCAGA
 AAATCAAAAG AGAACAACAT CTTCTATTCC CCTATCAGCA TCACATCAGC ATTAGGGATG
 AAATCAAAAG AGAACAACAT CTTCTATTCC CCTATCAGCA TCACATCAGC ATTAGGGATG
 GTCCTCTTAG GAGCCAAAGA CAACACTGCA CAACA**G**ATTA **AG**AAG -I2- GTTCT TCACTTTGAT
 GTCCTCTTAG GAGCCAAAGA CAACACTGCA CAACA**A**ATTA **GC**AAG -I2- GTTCT TCACTTTGAT
 CAAGTCACAG AGAACACCAC AG**G**AAAAAGCT GCAACATATC AT -I3- GTTGATAG GTCAGGAAAT
 CAAGTCACAG AGAACACCAC AG**A**AAAAAGCT GCAACATATC AT -I3- GTTGATAG GTCAGGAAAT
 GTTCATCACC AGTTTCAAAA GCTTCTGACT GAATTCAACA AATCCACTGA TGCATATGAG
 GTTCATCACC AGTTTCAAAA GCTTCTGACT GAATTCAACA AATCCACTGA TGCATATGAG
 CTGAAGATCG CCAACAAGCT CTTTCGGAGAA AA**A**ACGTATC **T**ATTTTTTACA G -I4- GAATATTTA
 CTGAAGATCG CCAACAAGCT CTTTCGGAGAA AA**G**ACGTATC **A**ATTTTTTACA G -I4- GAATATTTA
 GATGCCATCA AGAAATTTTA CCAGACCAGT GTGGAATCT**G** **T**TGATTTTGC AAATGCTCCA
 GATGCCATCA AGAAATTTTA CCAGACCAGT GTGGAATCT**A** **C**TGATTTTGC AAATGCTCCA
 GAAGAAAGTC GAAAGAAGAT TAACTCCTGG GTGGAAAGTC AAACGAATG -I5- AAAAAATTTAA
 GAAGAAAGTC GAAAGAAGAT TAACTCCTGG GTGGAAAGTC AAACGAATG -I5- AAAAAATTTAA
 AACCTA**A**ATC CTGA**AGG**T**A** TATTGGCAG**C** **A**ATAC**C**ACAT **T**GGTTCTTGT GAACGCAATC
 AACCTA**T**ATC CTGA**TGG****G**A**C** TATTGGCA**A**T GATAC**G**ACAC **T**GGTTCTTGT GAACGCAATC
 TATTTCAAAG GGCAGTGGGA GAA**G**AAATTT AA**T**AAAGAA**G** A**T**ACTAAAGA GGAAAAATTT
 TATTTCAAAG GGCAGTGGGA GAA**T**AAATTT AA**A**AAAGAA**A** A**C**ACTAAAGA GGAAAAATTT
 TGGCCAAACA AG -I6- AATACATA CAA**G**T**C**A**T**A CAGATGATGA GGCAATACAC **A**T**C**T**T**TT**C**AT
 TGGCCAAACA AG -I6- AATACATA CAA**A**T**C****T****G**T**A** CAGATGATGA GGCAATACAA **T**T**C****C**TT**A**T
 TTTGCCT**C**GC TGGAGGATGT ACAGGCCAAG GTCCTGGAAA TACCATACAA AGGCAAAGAT
 TTTGCCT**T**GC TGGAGGATGT ACAGGCCAAG GTCCTGGAAA TACCATACAA AGGCAAAGAT
 CTAAGCATGA TTGTG**T**TGCT GCCAAATGAA ATCGATGGTC **T****C**CAGAAG -I7- CT TGAAGAGAAA
 CTAAGCATGA TTGTG**C**TGCT GCCAAATGAA ATCGATGGTC **T****G**CAGAAG -I7- CT TGAAGAGAAA
 CTCACTGCTG AGAAATTGAT GGAATGGACA AGTTTGCAGA ATATGAGAGA GACA**C**GTGTC
 CTCACTGCTG AGAAATTGAT GGAATGGACA AGTTTGCAGA ATATGAGAGA GACA**T**GTGTC
 GATTTACACT TACCTCGGTT CAAA**G**TGGAA GAGAGCTATG ACCTCAAGGA CACGTTGAGA
 GATTTACACT TACCTCGGTT CAAA**A**TGGAA GAGAGCTATG ACCTCAAGGA CACGTTGAGA
 ACCATGGGAA TGGTG**G**ATAT CTTCAATGGG GATGCAGACC TCTCAGGCAT GACC**G**GGAGC
 ACCATGGGAA TGGTG**A**ATAT CTTCAATGGG GATGCAGACC TCTCAGGCAT GACC**T**GGAGC
 C**G**CGGTCTC**G** **T****G**C**T**ATCT**G****G** AGTCCTACAC AAGGCCTTTG TGGAGGT**T**AC **A**gaggagggga
 C**A**CGGTCTC**T** **C**AG**T**ATCT**A****A** AGTCCTACAC AAGGCCTTTG TGGAGGT**C**AC **T**gaggagggga
*gca*gaagctg *cagctgccac* *cgctgtagta* *ggat*t**cg**gat *catca***c**ct**a**c ttcaactAAT
*gtg*gaagctg *cagctgccac* *cgctgtagta* *gtag*t**cg**aat *tatca***t**ct**c**c ttcaactAAT
 GAAGAGTT**C** **A**TTGTAATCA CCCTTTCCTA TTCTTCATAA GGCAAATAA GACCAACAGC
 GAAGAGTT**T** **G**TTGTAATCA CCCTTTCCTA TTCTTCATAA GGCAAATAA GACCAACAGC
 ATCCTCTTCT ATGGCAGATT CTCATCCCC**G** TAG
 ATCCTCTTCT ATGGCAGATT CTCATCCCC**A** TAG

FIG. 2

REPLACEMENT SHEET

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SCCA1 MNSLSEANTK FMFDLFQQFR KSKENNIFYS PISITSALGM VLLGAKDNTA
SCCA2 MNSLSEANTK FMFDLFQQFR KSKENNIFYS PISITSALGM VLLGAKDNTA

QQIK|KVLHFD QVTENTT|GKA ATY|HVDRSGN VHHQFQKLLT EFNKSTDAYE
 QQIS|KVLHFD QVTENTT|EKA ATY|HVDRSGN VHHQFQKLLT EFNKSTDAYE

LKIANKLFG E KTYL|FLO|EYL DAIKKFYQTS VES|VDFANAP EESRKKINSW
 LKIANKLFG E KTYQ|FLO|EYL DAIKKFYQTS VES|IDFANAP EESRKKINSW

VESQTN|EKIK NLI|E|GN|IGS| NTTLVLVNAI YFKGQWE|K|F| NKED|TKEEKF
 VESQTN|EKIK NLI|E|PD|GT|IGN| DTTLVLVNAI YFKGQWEN|K|F| K|KENT|TKEEKF

WPNK|NTYKS| QMMRQY|TSFH| FASLEDVQAK VLEIPYKGKD LSMIVLLPNE
 WPNK|NTYKS| QMMRQY|NSFN| FASLEDVQAK VLEIPYKGKD LSMIVLLPNE

IDGLQ|KLEEK LTAEKLM EWT SLQNMRETR|V| DLHLPRFK|V|E| ESYDLKDTLR
 IDGLQ|KLEEK LTAEKLM EWT SLQNMRETC|V| DLHLPRFK|ME| ESYDLKDTLR

TMGMVD|IFNG DADLSGMTGS| RGLV|LSG|VLH KAFVEVTEEG| AEAAAA| TAVV
 TMGMVN|IFNG DADLSGMTWS| HGLSV|SK|VLH KAFVEVTEEG| VEAAAA| TAVV

GFGSSPAST N EEFH|CNHPFL FFIRQNKTNS ILFYGRFSSP
VVELSSPST N EEF|CNHPFL FFIRQNKTNS ILFYGRFSSP

Fig. 3

REPLACEMENT SHEET

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SCCA1/A2 cDNA SEQUENCE

-I1 - ATGAATTCAC TCAGTGAAGC CAACACCAAG TTCATGTTTCG ACCTGTTCCA ACAGTTCAGA
AAATCAAAAG AGAACAACAT CTTCTATTCC CCTATCAGCA TCACATCAGC ATTAGGGATG
GTCCTCTTAG GAGCCAAAGA CAACACTGCA CAACAGATTA AGAAG -I2- GTTCT TCACTTTGAT
CAAGTCACAG AGAACACCAC AGGAAAAGCT GCAACATATC AT -I3- GTTGATAG GTCAGGAAAT
GTTTCATCACC AGTTTCAAAA GCTTCTGACT GAATTCAACA AATCCACTGA TGCATATGAG
CTGAAGATCG CCAACAAGCT CTTCGGAGAA AAAACGTATC TATTTTTTACA G -I4- GAATATTTA
GATGCCATCA AGAAATTTTA CCAGACCAGT GTGGAATCTG TTGATTTTGC AAATGCTCCA
GAAGAAAGTC GAAAGAAGAT TAACTCCTGG GTGGAAAGTC AAACGAATG -I5- A AAAAATTAAA
AACCTAATTC CTGAAGGTAA TATTGGCAGC AATACCACAT TGGTTCTTGT GAACGCAATC
TATTTCAAAG GGCAGTGGGA GAAGAAATTT AATAAAGAAG ATACTAAAGA GGAAAAATTT
TGGCCAAACA AG -I6- AATACATA CAAGTCCATA CAGATGATGA GGCAATACAC ATCTTTTTCAT
TTTGCCCTCGC TGGAGGATGT ACAGGCCAAG GTCCTGGAAA TACCATACAA AGGCAAAGAT
CTAAGCATGA TTGTGTTGCT GCCAAATGAA ATCGATGGTC TCCAGAAG -I7- **CT TGAAGAGAAA**
CTCACTGCTG AGAAATTGAT GGAATGGACA AGTTTGCAGA ATATGAGAGA GACATGTGTC
GATTTACACT TACCTCGGTT CAAAATGGAA GAGAGCTATG ACCTCAAGGA CACGTTGAGA
ACCATGGGAA TGGTGAATAT CTTCAATGGG GATGCAGACC TCTCAGGCAT GACCTGGGAGC
CACGGTCTCT CAGTATCTAA AGTCCTACAC AAGGCCTTTG TGGAGGTCAC *Tgaggaggga*
gtggaagctg cagctgccac cgctgtagta gtagtcgaat tatcatctcc ttcaactAAT
GAAGAGTTCT GTTGTAATCA CCCTTTCCTA TTCTTCATAA GGCAAATAA GACCAACAGC
ATCCTCTTCT ATGGCAGATT CTCATCCCCA TAG

FIG. 4

REPLACEMENT SHEET

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SCCA1A2 amino acid sequence

MNSLSEANTK FMFDLFQQFR KSKENNIFYS PISITSALGM VLLGAKDNTA
QQIK₁ KVLHFD QVTENTT₂GKA ATY₃ HVDRSGN VHHQFQKLLT EFNKSTDAYE
LKIANKLFGE KTY₄FLQ₅ EYL DAIKKFYQTS VES₆YDFANAP EESRKKINSW
VESQTN₇ EKIK NLI₈PE₉GNIGS₁₀ NTTLVLVNAI YFKGQWEK₁₁KF₁₂ NKED₁₃TKEEF
WPNK₁₄ NTYKS₁₅ QMMRQYT₁₆SFH₁₇ FAS₁₈LEDVQAK VLEIPYKGKD LSMIVLLPNE
IDGLQK₁₉ LEEK LTAEKLMEWT SLQNMRET₂₀CV DLHLPRFK₂₁ME₂₂ ESYDLKDTLR
TMGMVN₂₃IFNG DADLSGMT₂₄WS₂₅ HGLSV₂₆SK₂₇VLH KAFVEVTEEG₂₈ VEAAAA₂₉TAVV
VVEL₃₀SSPST₃₁ N EEFHCNHPFL FFIRQNKTNS ILFYGRFSSP

FIG. 5

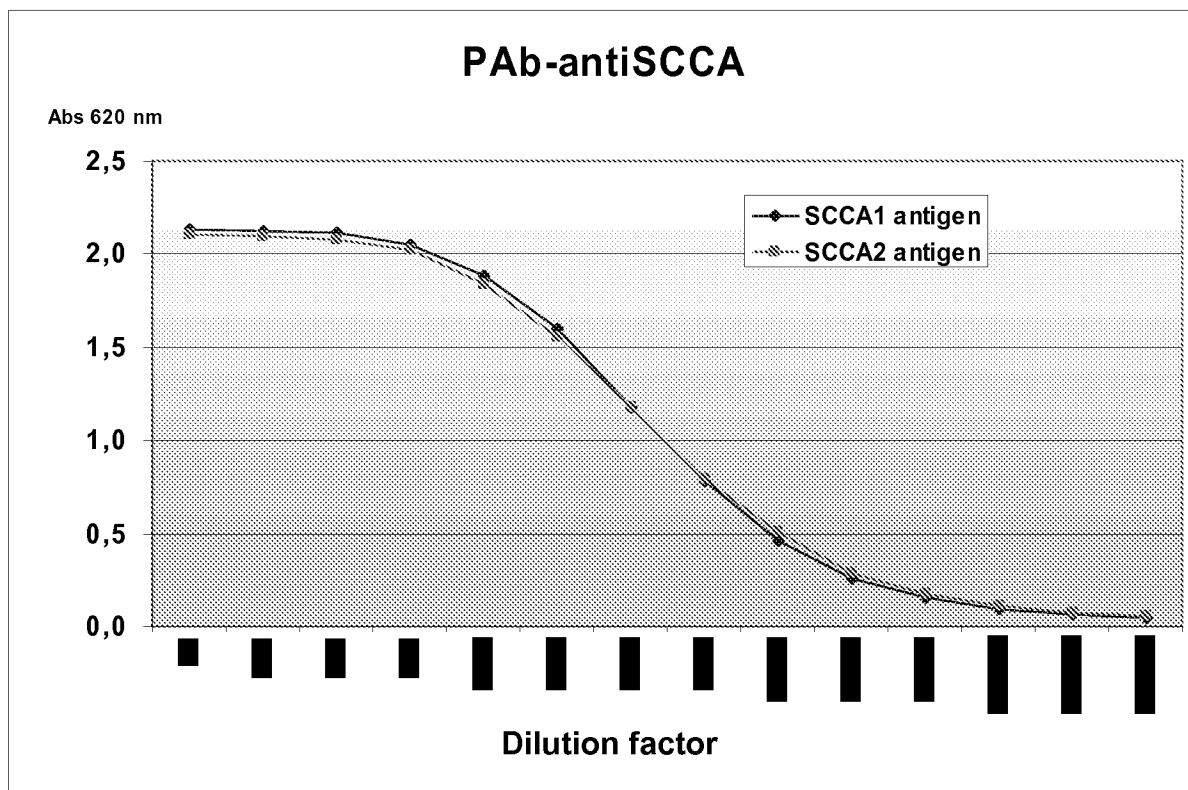


FIG. 6

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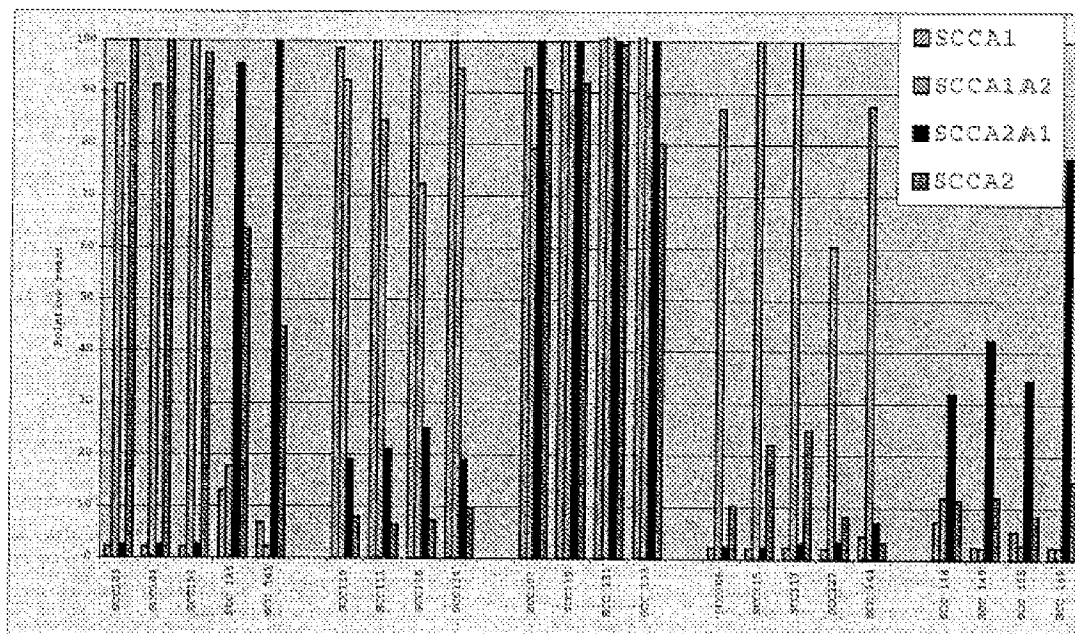


FIG. 7

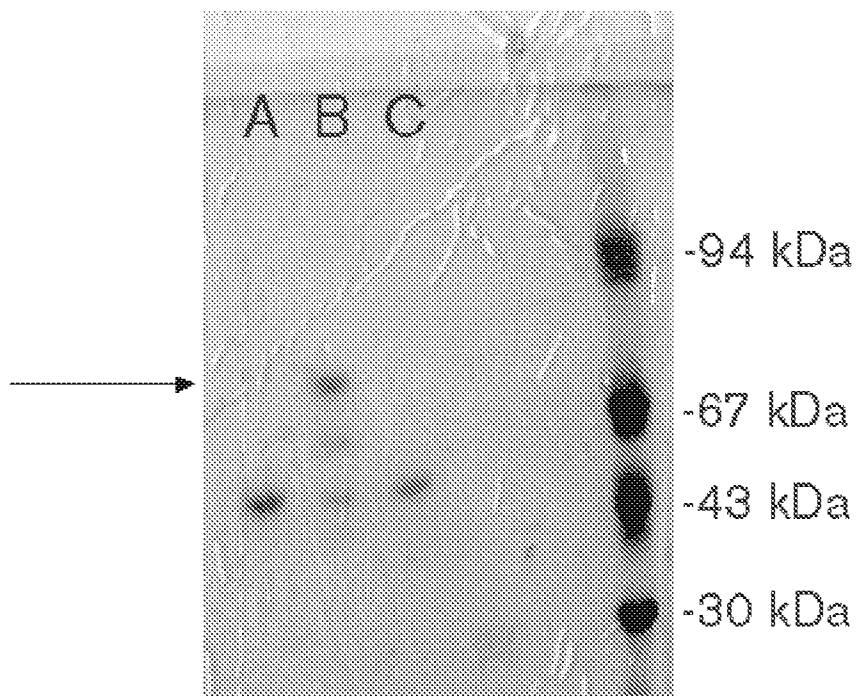


FIG. 8

REPLACEMENT SHEET

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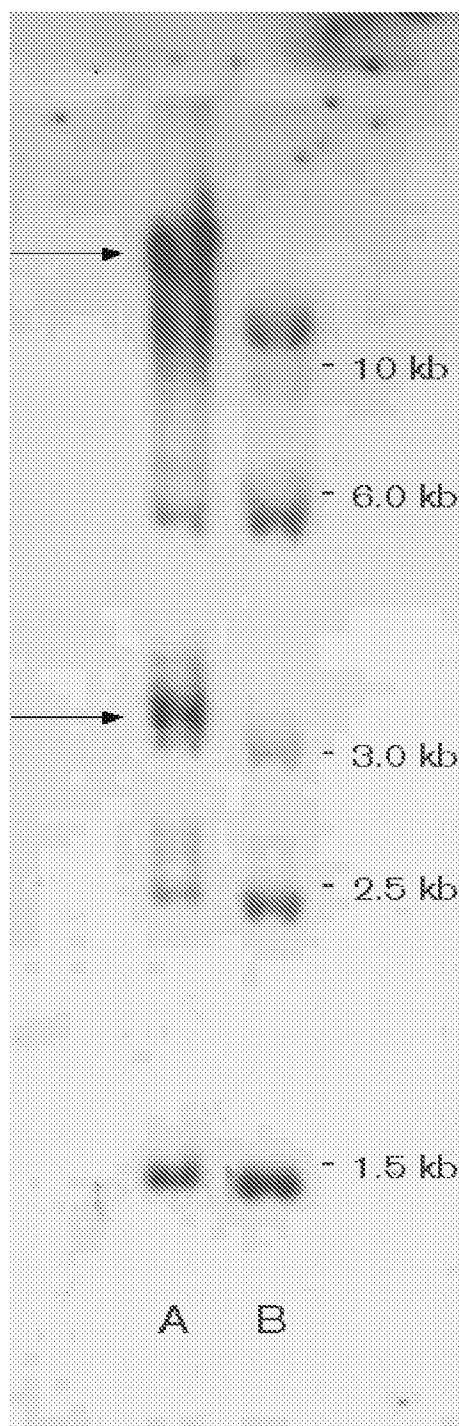


FIG. 9